

A Five-Source Plan to Supply Water for the Growing San Geronio Pass

***Beaumont Cherry Valley Water
District***

June 9, 2005

BCVWD Background

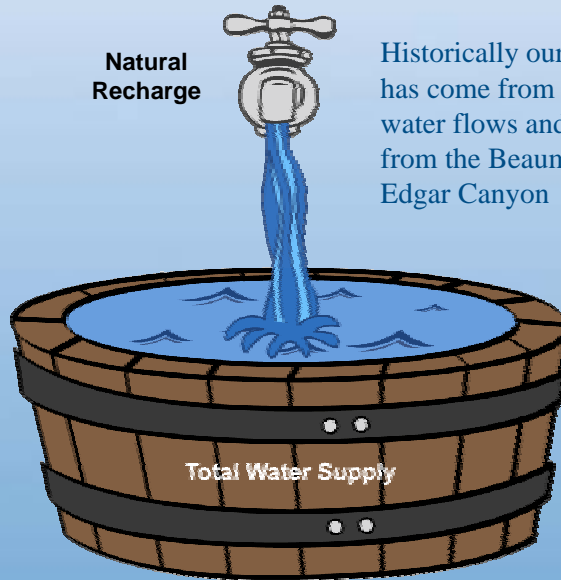
- ❖ Established in 1919
- ❖ Present service area is 15 square miles in Riverside County, Beaumont and Cherry Valley
- ❖ Presently serving 10,000 service connections
- ❖ Connections have increase by 60% since 2000



BCVWD Background

Natural
Recharge

Historically our water supply has come from natural surface water flows and groundwater from the Beaumont Basin and Edgar Canyon



Our Challenge – Growth

"A big building boom is rapidly changing the face of the once rural San Geronio Pass."

-The Riverside Press-Enterprise

March 19, 2004



Our Challenge - Growth (cont.)

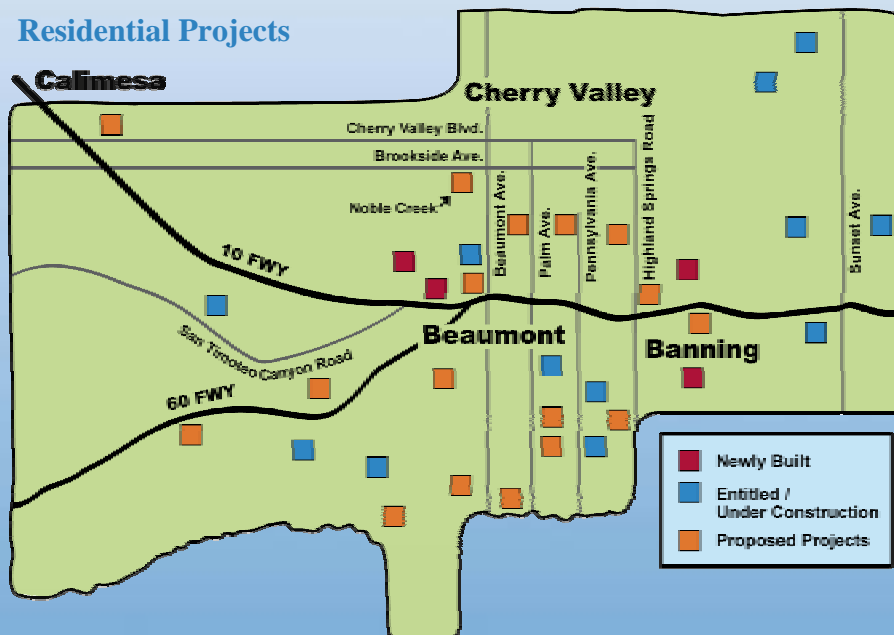
Population in the Pass area will increase from 100,000 this year.....



.....To 300,000 in 2025

Our Challenge – Growth (cont.)

Residential Projects



District Water Demand

BCVWD faces a rapidly increasing demand for water

- ❖ Now installing up to 150 meters per month
- ❖ Capital Budget for 2005 is \$21.5 million
- ❖ Additional \$50 million to be spent on the water system by 2010
- ❖ Must meet a projected water demand of 29,366 AFY by 2025



Water Demand (cont.)

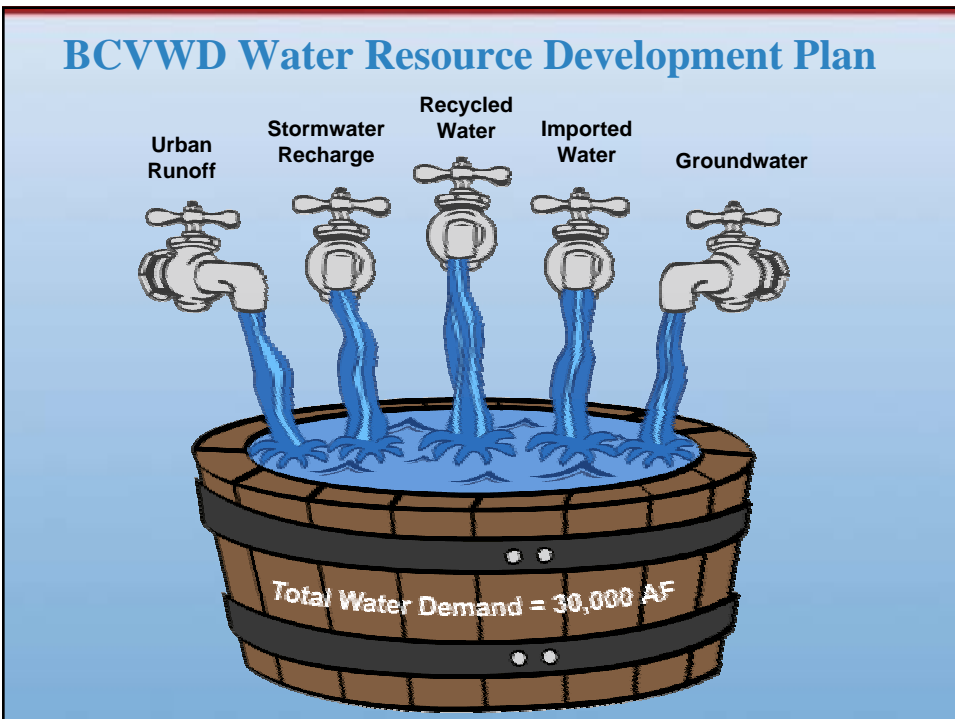
New Recreational Demand

Three new golf courses since 1999

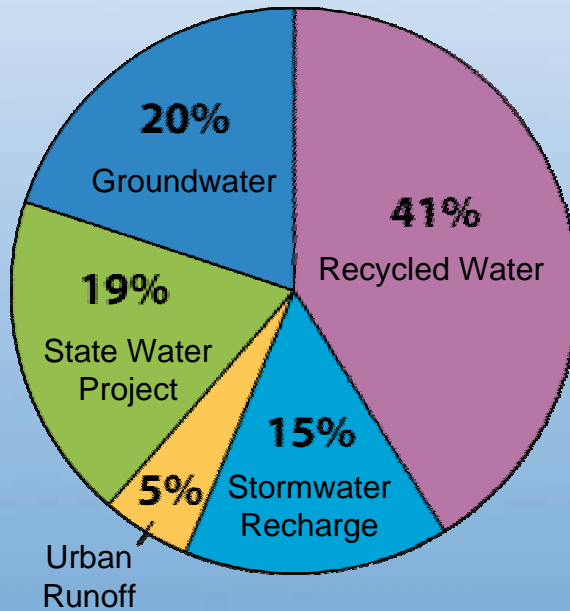
- ❖ Increases area demand by 3,100 acre-feet a year
- ❖ Currently using potential drinking water for irrigation
- ❖ Other existing irrigation demands require an additional 3,000 acre-feet of groundwater per year



Where will we get the water to
meet the new demands?



Water Resource Plan Breakdown (2025)



Urban Runoff



Urban Runoff (cont.)



Urban Runoff (cont)

- ❖ In 2004 the first urban runoff basin was constructed
- ❖ Urban runoff will generate 1,300 acre-feet of water per year



Storm Water Capture

Storm Capture from Runoff

- ❖ More than 40-acres of basins exist today in District owned watershed
- ❖ District began capture program in 1902 using surface water rights that date back to the mid-1800s.



Stormwater Runoff (cont.)

- ❖ 80 acres of additional recharge basins will capture stormwater from Little San Geronio Creek, Wallace Canyon and Noble Canyon
- ❖ These basins will also store state water project water and surplus recycled water
- ❖ Stormwater recharge will generate 4,100 acre-feet of water per year on average



Stormwater Runoff (cont.)




- ❖ Stormwater will be captured and recharged at a wetlands park also available for community use.

Recycled Water for Irrigation



Recycled Water (cont.)

- ❖ Partnership between BCVWD and City of Beaumont (started in 1993)
 - ✓ City built and operates treatment facility with a current capacity of 1.5 million gallons/day
 - ✓ Ultimate treatment facility expansion is planned to be 8.5 million gallons/day
 - ✓ City of Beaumont and BCVWD sign a joint financing agreement to help pay for new facilities and new water sources
 - ❖ Total recycled system cost of \$30 million at build out
 - ❖ Produces 6,000 AFY of recycled water by 2025
- 

Recycled Water (cont.)

❖ Title 22 effluent currently lost to the Beaumont Basin



Recycled Water (cont.)

Treated Wastewater – Half of what goes in the meter gets flushed.

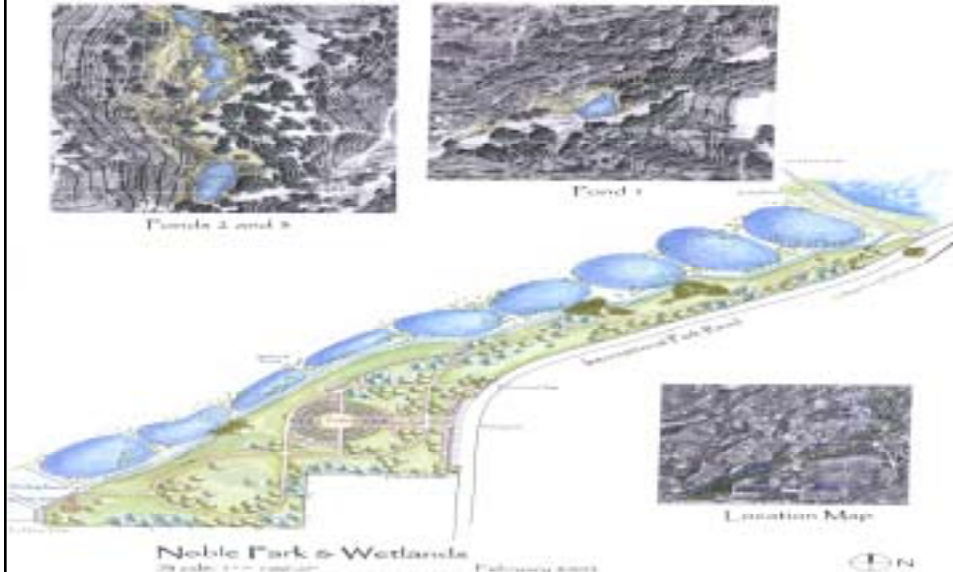
❖ Residential growth will increase recycled water production 500% by 2025.

❖ Provides water for:

- Golf Courses
- Landscaping
- Agriculture
- Parks
- Greenbelts
- Schools



Recycled (cont.) Surplus Recycled Water will supply a new wetlands and recharge the Beaumont Basin



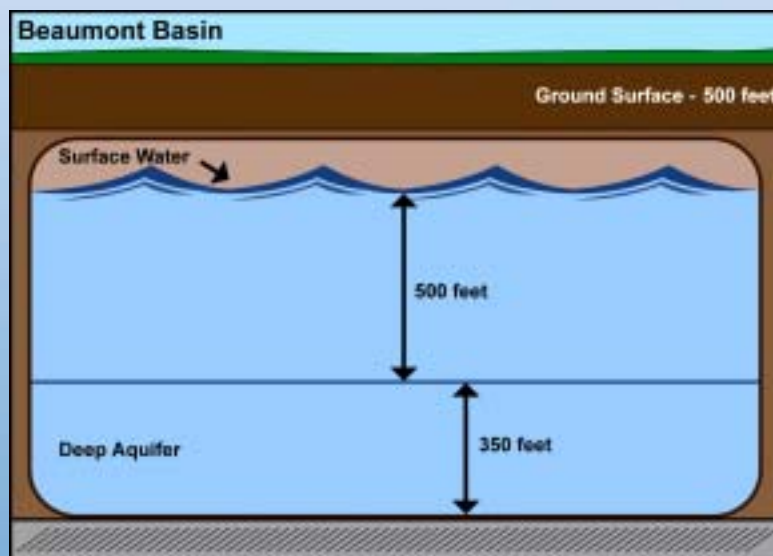
Groundwater From The Beaumont Basin

How Much Groundwater Is There?



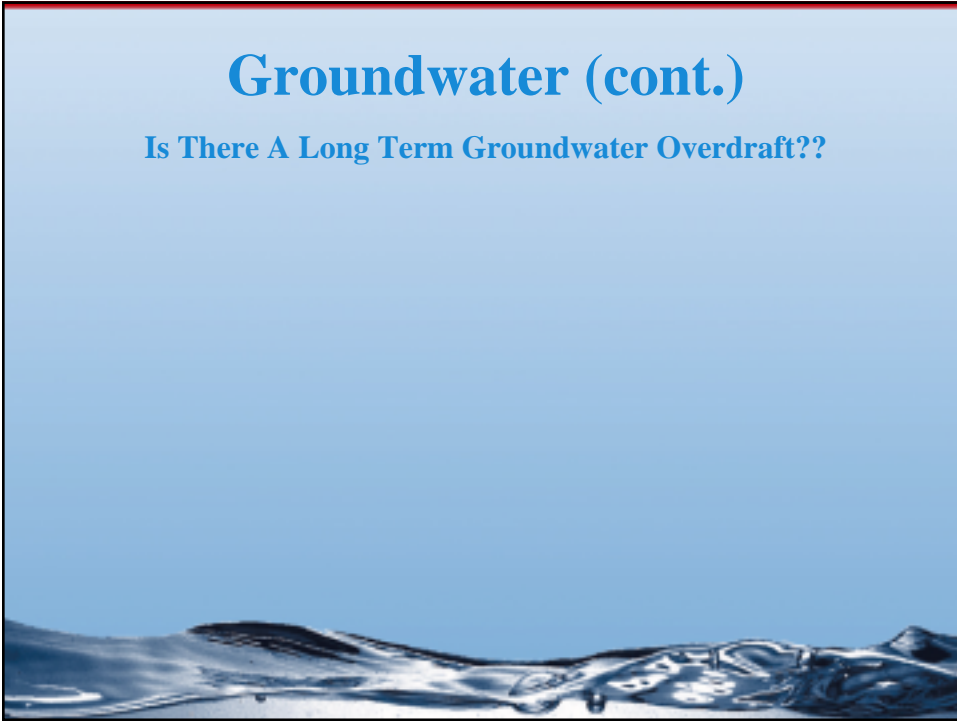
Groundwater - (cont.)

The Beaumont Basin will continue to be a key source



Groundwater (cont.)

Is There A Long Term Groundwater Overdraft??



Managing Our Groundwater (cont.)

- ❖ BCVWD Helped found a new group, the San Timoteo Watershed Management Authority (STWMA), to harness regional water resources and develop a management strategy for our local resources (2001)

STWMA member agencies include:

- City of Beaumont
- BCVWD
- South Mesa Mutual Water Company
- Yucaipa Valley Water District

STWMA filed to adjudicate main groundwater basin in 2003



State Water Project Import Supplies

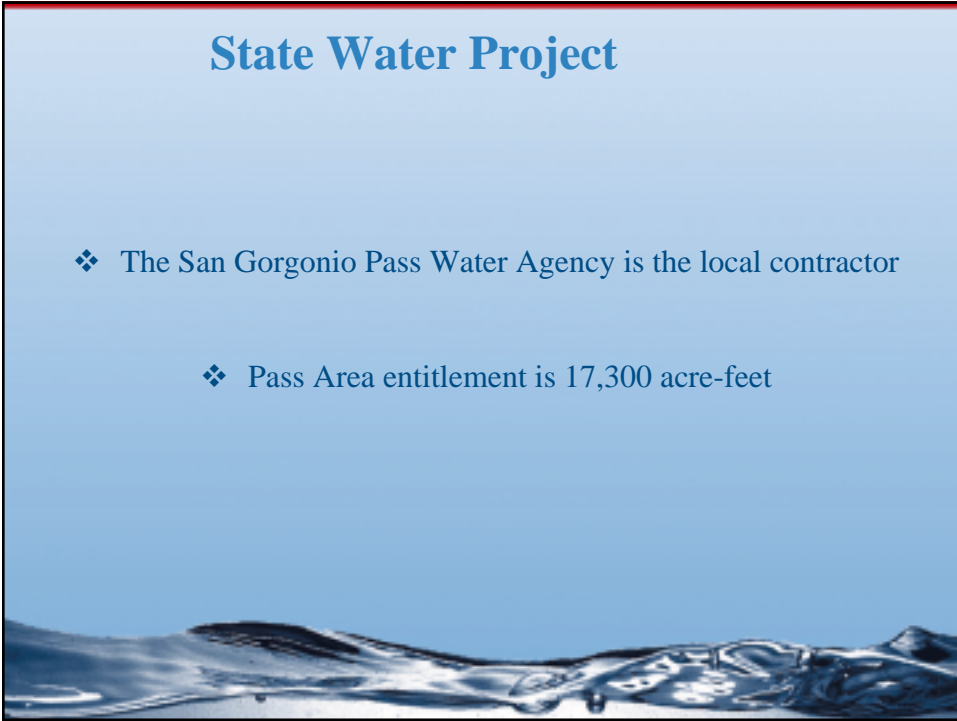
....and utilizing state resources

- ❖ State Water Project Water



State Water Project

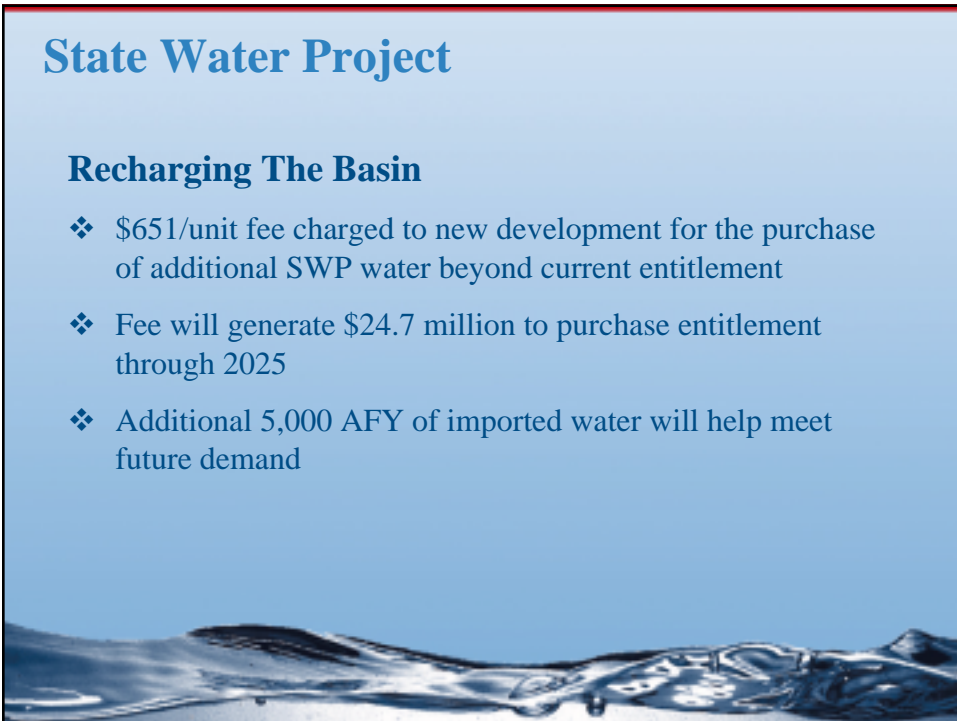
- ❖ The San Geronio Pass Water Agency is the local contractor
- ❖ Pass Area entitlement is 17,300 acre-feet



State Water Project

Recharging The Basin

- ❖ \$651/unit fee charged to new development for the purchase of additional SWP water beyond current entitlement
- ❖ Fee will generate \$24.7 million to purchase entitlement through 2025
- ❖ Additional 5,000 AFY of imported water will help meet future demand

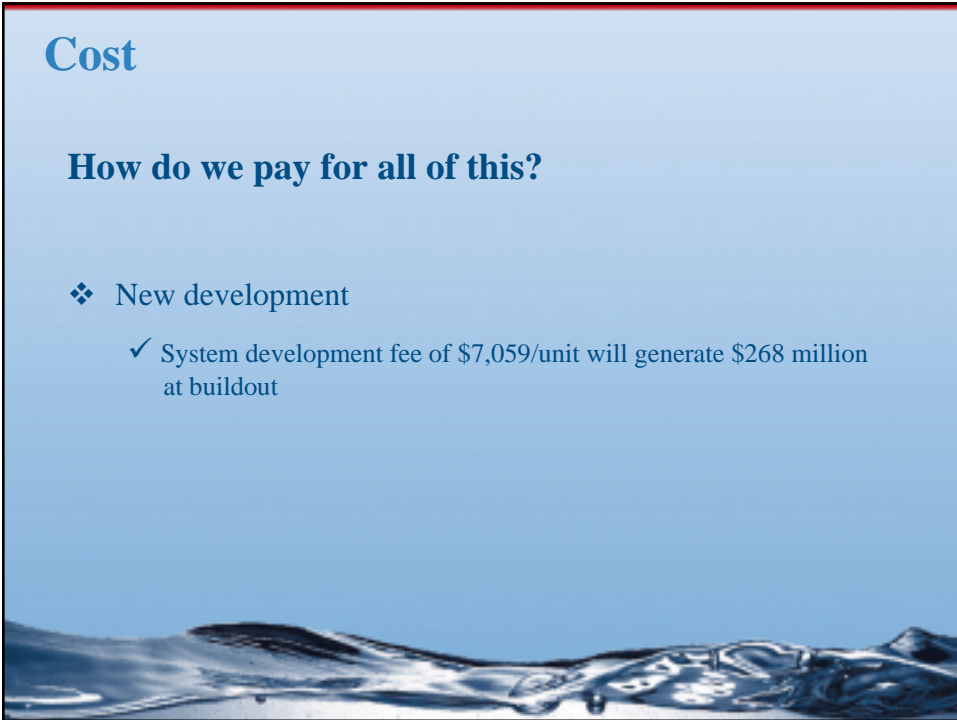


Cost

How do we pay for all of this?

❖ New development

- ✓ System development fee of \$7,059/unit will generate \$268 million at buildout



Project Costs

<u>Project</u>	<u>Cost</u>	<u>Water</u>	<u>Funding</u>
Stormwater Recharge	\$20 Million	4,100 AFY	System Development Fee
Recycled Water	\$30 Million	6,000 AFY	System Development Fee
SWP	\$32.9 Million	5,000 AFY	District Facility Fee
Groundwater	\$45.9 Million	5,300 AFY	System Development Fee
Urban Runoff	\$5 Million	1,300 AFY	Development Impact Fee



Final Thoughts

- ❖ THE CHALLENGE – We're experiencing a growth boom that will significantly increase water demand.
- ❖ THE PLAN - BCVWD's Water Resource Development Plan will maximize use of all local water sources to meet development demands reducing reliance on State Project supplies.
- ❖ THROUGH 2025- With the BCVWD Water Resource Plan in place, District will meet all water demands and have 90,000 acre feet in storage for future demands

